

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P312086

Luminaire Tested: **14FCZ2-35-UNV-L83050-RDP-CP250-W2A-U-3500K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P312086  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-35-UNV-L83050-RDP-CP250-W2A-U-3500K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET  
Light Source: (168) 3500K TUNABLE CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment:

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
AS-5443-2	Good	REFLECTOR
AS-5443-3	Good	DRIVER
AS-5443-4	Good	UPPER MODULE
AS-5443-5	Good	LENS
AS-5443-6	Good	DRIVER 2
AS-5443-7	Good	TRIM RING

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2006.0 lumens  
Efficiency: N/A  
Efficacy: 68.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

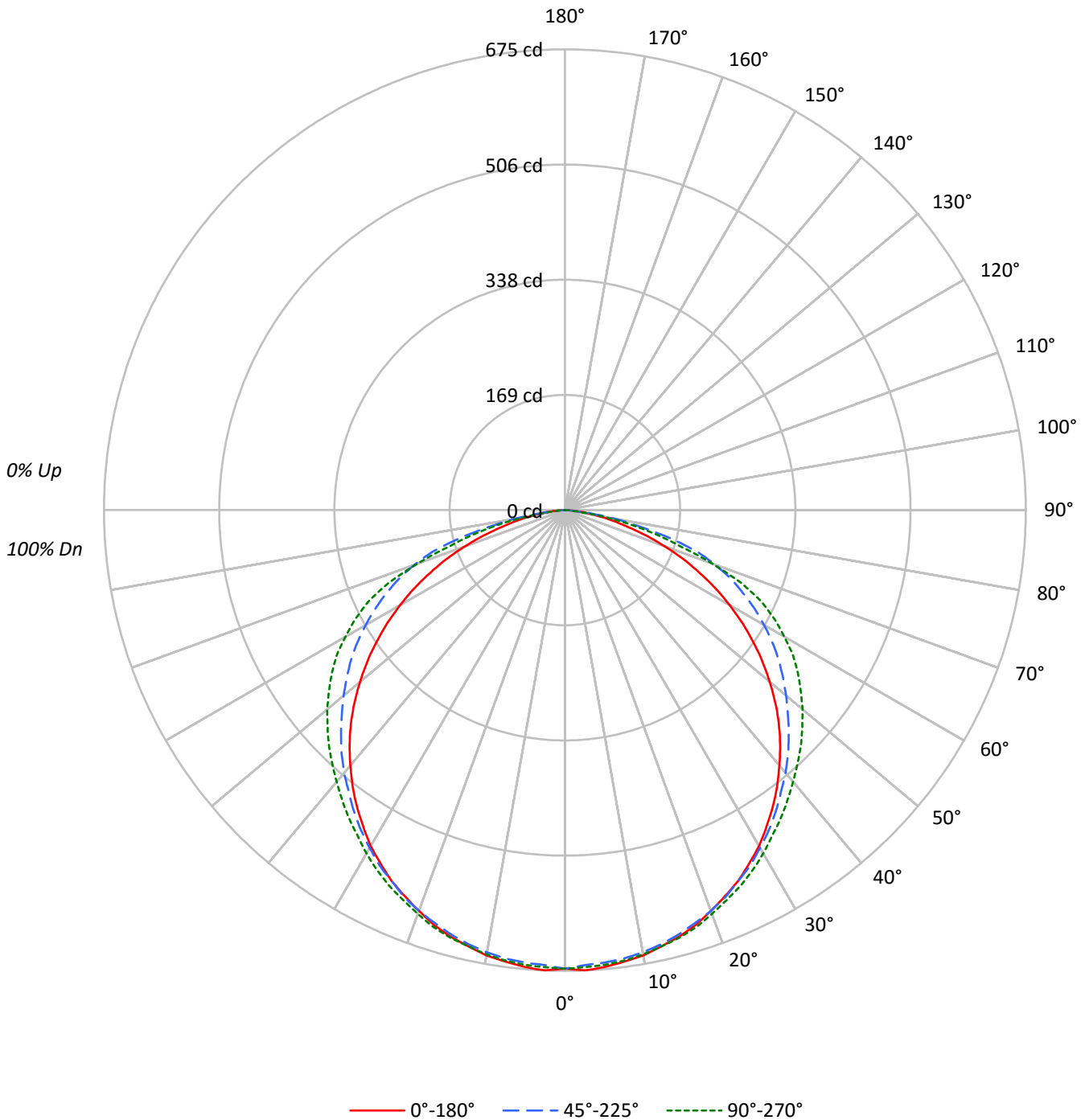
Input Watts (W): 29.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1808	1808	1808
5°	1815	1798	1806
10°	1810	1797	1806
15°	1802	1793	1806
20°	1790	1790	1803
25°	1781	1781	1804
30°	1766	1776	1805
35°	1744	1770	1811
40°	1716	1766	1826
45°	1687	1764	1859
50°	1639	1770	1901
55°	1580	1793	1955
60°	1500	1812	1998
65°	1386	1835	2024
70°	1232	1848	1811
75°	993	1660	1449
80°	776	1165	947
85°	531	340	241



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.6	3.2
10°-20°	182.4	9.1
20°-30°	277.8	13.8
30°-40°	338.4	16.9
40°-50°	359.0	17.9
50°-60°	338.8	16.9
60°-70°	273.6	13.6
70°-80°	148.4	7.4
80°-90°	24.0	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	523.9	26.1
0°-40°	862.2	43.0
0°-60°	1560.0	77.8
0°-90°	2006.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2006.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	672	672	672	672	672	
5°	672	670	666	670	669	64
15°	647	645	644	648	648	182
25°	600	598	600	606	608	276
35°	531	534	539	550	551	332
45°	443	450	464	481	489	341
55°	337	351	382	407	417	301
65°	218	244	288	312	318	216
75°	96	139	160	144	139	104
85°	17	19	11	9	8	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	671.9	671.9	671.9	671.9	671.9
2.5°	675.0	671.9	667.2	671.9	670.3
5°	671.9	670.3	665.6	670.3	668.7
7.5°	667.2	667.2	662.5	665.6	665.6
10°	662.5	660.9	657.8	662.5	660.9
12.5°	654.6	653.1	651.5	656.2	654.6
15°	646.8	645.2	643.7	648.4	648.4
17.5°	637.4	635.8	634.3	640.5	640.5
20°	624.9	624.9	624.9	631.1	629.6
22.5°	612.3	612.3	613.9	620.2	618.6
25°	599.8	598.3	599.8	606.1	607.7
27.5°	584.2	585.7	587.3	593.6	595.1
30°	568.5	570.1	571.6	579.5	581.0
32.5°	549.7	552.8	556.0	565.4	565.4
35°	530.9	534.0	538.7	549.7	551.3
37.5°	510.6	513.7	519.9	532.5	535.6
40°	488.6	493.3	502.7	515.2	519.9
42.5°	466.7	473.0	483.9	498.0	504.3
45°	443.2	449.5	463.6	480.8	488.6
47.5°	418.2	426.0	443.2	465.1	471.4
50°	391.5	402.5	422.8	446.3	454.2
52.5°	364.9	377.4	402.5	427.5	435.4
55°	336.7	350.8	382.1	407.2	416.6
57.5°	308.5	324.2	360.2	386.8	396.2
60°	278.8	297.6	336.7	363.3	371.2
62.5°	249.0	270.9	313.2	339.8	346.1
65°	217.7	244.3	288.2	311.7	317.9
67.5°	187.9	219.3	263.1	280.3	280.3
70°	156.6	191.1	234.9	239.6	230.2
72.5°	125.3	164.4	203.6	186.4	178.5
75°	95.5	139.4	159.7	144.1	139.4
77.5°	72.0	112.8	112.8	103.4	100.2
80°	50.1	86.1	75.2	65.8	61.1
82.5°	32.9	48.5	39.2	31.3	26.6
85°	17.2	18.8	11.0	9.4	7.8
87.5°	6.3	3.1	1.6	3.1	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)